

Moving to a secure and compliant SAP S/4HANA environment. What's next?

Webinar KPMG Advisory

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Content

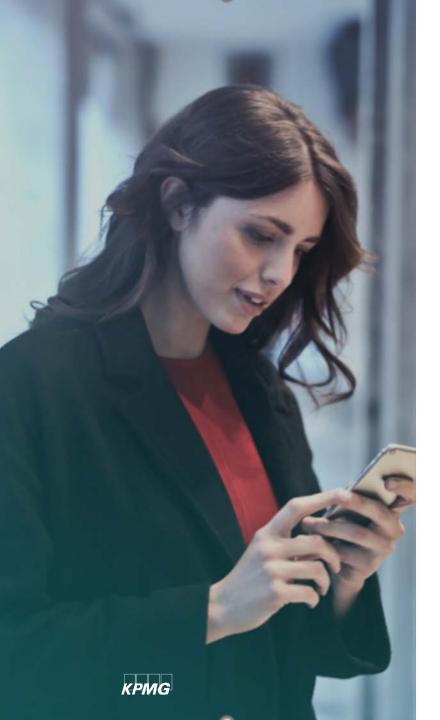
00	Introduction	
01	Security and compliance challenges in SAP S/4HANA	
02	KPMG Powered Enterprise	2
03	What's next?	3
04	Q&A	4

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Today's speake



Hans Meulmeester

Hans Meulmeester is the competence lead of IT Governance, Risk & Compliance (IT GRC) within the KPMG Advisory Belgium practice.

He has accumulated thorough expertise in various fields within IT GRC including control assessment/integration, FSA, SOx, Identity and Access Management (IAM), Segregation of Duties (SoD), User- & Authorization management. Therefore he is considered an authority with regard to the domains of IT Compliance, Application security and GRC solutions.



Reinaart Claesen

Reinaart Claesen is a senior manager at KPMG Advisory Belgium focusing on SAP S/4HANA technology and transformation within the Digital Risk Management and CFO Advisory service lines.

In the light of KPMG One Advisory, Reinaart and his team are supporting clients as a business transformation partner in SAP S/4HANA finance process (incl. tax) and compliance related domains.

Accumulating his previous SAP Finance integration activities, Reinaart is now extensively involved in ERP value case design, large scale quality assurance and project management roles within end-to-end SAP S/4HANA transformation tracks.

Cedric Guisson

Cedric is part as an advisor of the IT Governance, Risk & Compliance team within the KPMG Advisory practice, focusing on SAP authorizations, security and segregation of duties. In addition, Cedric is part of the SAP technology team, supporting the development of new services and the exploration of new products developed by SAP.



Today's experts



Maarten Vercruyssen

Maarten is manager within KPMG Advisory focusing on SAP Security and Governance, Risk and Compliance. With over 8 years of experience, Maarten worked at multiple clients and projects with regard the design and implementation of SAP authorizations, as well as in auditing and reviewing existing authorizations in both ECC and S/4HANA environments.

Dimitri Van Hoolst-Matthyssen

Dimitri is a Senior Advisor at KPMG Belgium focusing on SAP S/4HANA technology and digital risk management. His key expertise lays within setting up governance, risk & compliance frameworks and assisting clients in their move to SAP S/4HANA.







What are key security and compliance challenges during an ERP business transformation?



What challenges do companies face?



Respond to new technologies and transformation trends



Improve cost and agility by using new solutions



Increase pace of change to match customers, competitors and regulators



Attract and retain talent in a highly competitive marketplace



Mitigate process risk and regulation with proactive and preventive controls



Improve return on capital through better data and insights



The evolution and future of SAP

The evolution of SAP

- HANA is the fastest growing application in SAP's history
- SAP is rapidly re-platforming their core ERP on the HANA technology
- Future innovations are focused on the HANA platform

What is HANA?

- HANA is an acronym for <u>H</u>igh Performance <u>An</u>alytical <u>A</u>ppliance
- Focused on 3 elements to increase performance:
 - Columns-oriented database
 - In-memory appliance
 - · Designed for multi core computing





KPMG EMA GRC Survey 2019 SAP S/4HANA

Why are our clients moving to SAP (S/4)HANA?

49%

of interviewees have implemented a SAP HANA platform

16%

of the interviewees are already running SAP S/4HANA

79%

of interviewees see the SAP S/4HANA platform as a business case due to process efficiency

Why would you migrate to HANA?

26%

Anticipation of end of business suite maintenance and support (2027)

23%

Improved performance of SAP solutions

21%

Reporting possibilities

18%

Implementation of SAP S/4HANA Finance or Central Finance 12%

New SAP S/4HANA implementation (Greenfield)

When are you planning to migrate to HANA?

22%

Within 24 months

17%

Between 24 and 36 months

11%

After 36 months

33%

No plans to move to SAP HANA

1/%

No decision made

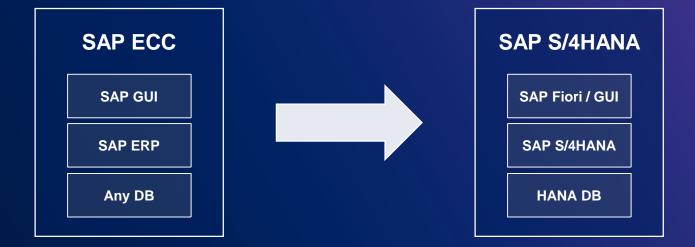


What are key changes in SAP S/4HANA?

Powered by the in-memory HANA database

On-premise and cloud capabilities

Improved user experience with Fiori





How is this transformation impacting your control environment?

What do we need to consider when moving to SAP S/4HANA?

Implementation Scenario

Are you opting for a greenfield or brownfield implementation (i.e. new implementation or conversion)?

Impact of redesigned processes on the current control framework.

Service Model

Are you moving to an on-premise or cloud environment? Do you opt for a single or multi-tenant cloud setup?

➡ Impact of quarterly releases on your business processes: How do they impact the control and authorization model?

Data Model

The SAP S/4HANA data model is fully redesigned in order to leverage the features and capabilities of the SAP HANA database.

Some tables will become obsolete. Authorizations are set up on a database level. How does this impact controls and authorizations?

Process Design

SAP S/4HANA comes with several new functionalities, processes and reporting capabilities that can increase the organization's efficiency.

→ Various transactions and reports will no longer be used. What is the impact of these changes on the current controls?

Fiori UX

Are you adopting the Fiori UX from the start, or will you be using SAP GUI alongside?

The impact of Fiori transactions on your control environment must be evaluated. How does Fiori change the authorization model?



What is the impact on my controls and security framework?

Data model and finance process simplifications – Some examples of changes

Change description

Business Partner

Cost Elements

All customer, vendor, & business partner master data centralized under the BP. Transaction code BP is the single point of entry to create, edit, & display master data for BPs, customers, & vendors. Legacy Customer/Vendor master data transaction codes are not available.

- Goods Movements

 MIGO will be the centralized screen for goods movement.

 FIORI apps are available for view of material stock/documents.

 Other goods movement transaction codes are removed.
- S/4HANA Credit Management [UKM* transactions] replaces ERP's FI-AR Credit Management functionality. FI-AR credit transactions become obsolete.
 - All cost element master data becomes part of the chart of accounts. All cost element maintenance will now be conducted via transaction code FS00. Legacy transaction codes are removed.

Impact on the controls and security framework

Vendor/Customer Master security controls redesigned
 on Business Partner. Master data authorization groups,
 BP SAP GRC security objects, etc. ruleset impacts

- All movement type security role controls redeveloped around MIGO transaction only. SAP GRC ruleset impact.
- Redevelopment of credit management security roles & controls. SAP GRC ruleset impact.
 - New G/L master security controls if segregating cost element. SAP GRC ruleset impacts.



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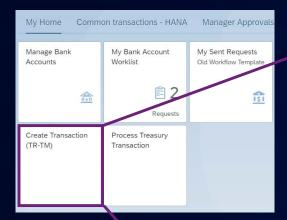
Fiori UX

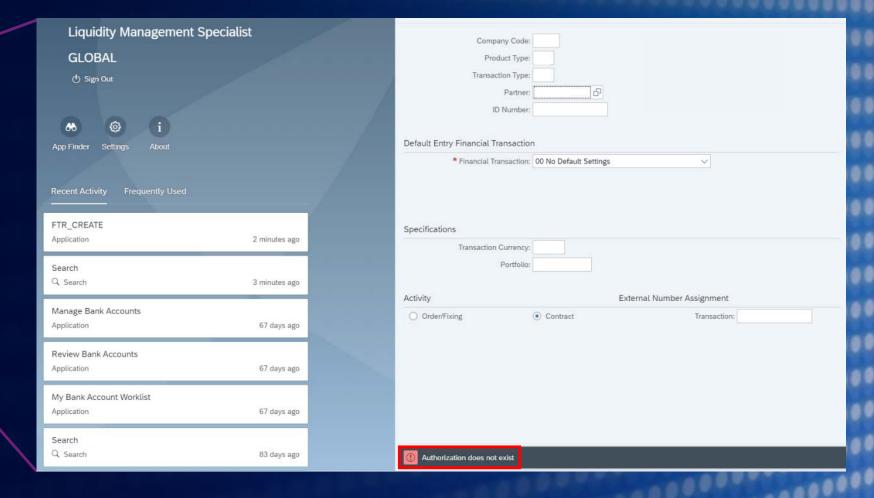
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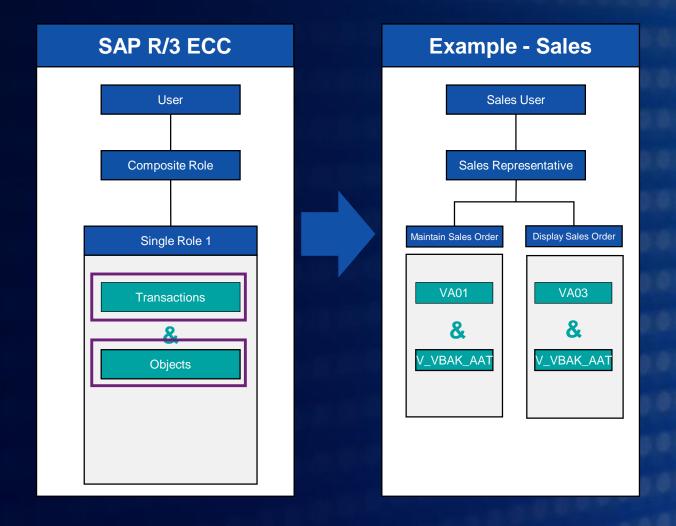
Use case - Fiori UX





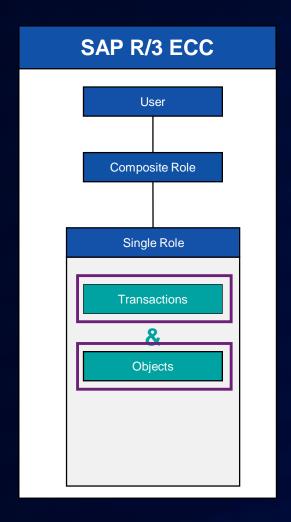


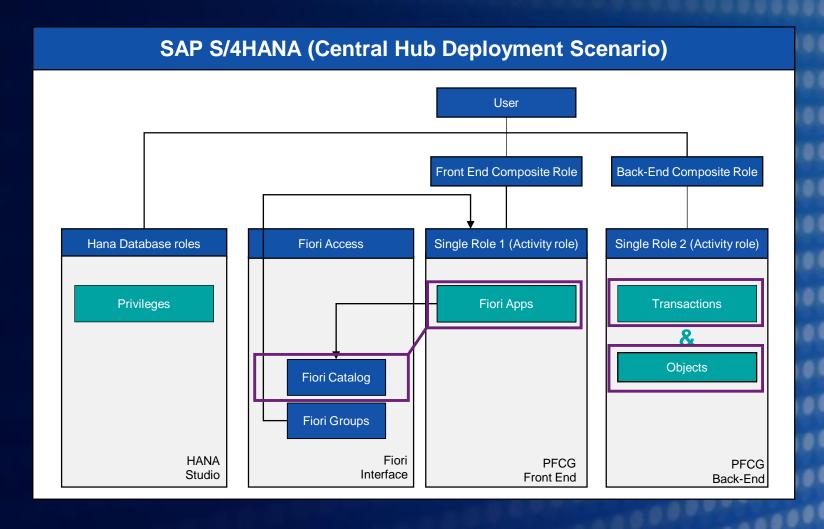
Use case - "Authorization does not exist"





Use case - "Authorization does not exist"







Security concept in SAP S/4HANA

An increased level of complexity



Security Requirements

The security concept is applicable for:

- UX Layer
 - → Fiori
- Application Layer
 - → Back-end system
- Database Layer
 - → HANA



UAM

In order to work with S/4HANA, access to frontand back-end is required.

HANA is role based→ Roles can cover a.o. privileges



Authorization

Fiori combines:

- Full Fiori applications
- Tiles using transactions in the background

Therefore, HANA still uses transactions like SE16H, FBL5H, etc.

Technicalities are hidden behind the tiles for end-users



What happens when it goes right?



Manage risks and comply with regulations



Reduce **distractions** and manual interventions



Ensure stakeholder confidence



Gain process efficiencies and reduce costs





How can KPMG's Powered Enterprise framework accelerate and embed compliancy in your SAP S/4HANA transformation?





Powered Enterprise is a comprehensive method and set of assets based on decades of business and technology experience in business transformation

We built Powered Enterprise to help you...



Start from a model that is based on our business and technology experience



Transform more efficiently with reduced risk, following leading practices

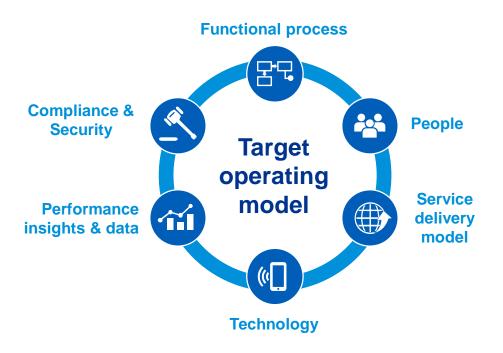


Establish a governance environment of proven and tested business controls

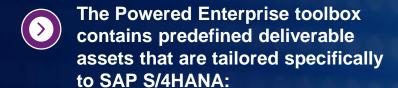


What's in the box?

Validate pre-built operating models, don't start from scratch.







- Target operating models
- Service model and organizational design
- Industry insights
- Business process taxonomies
- Functional process flows
- Risk and control catalogues
- People, roles and responsibilities
- Test scripts and protocols
- User training content and schedules
- KPI libraries
- **–** ...



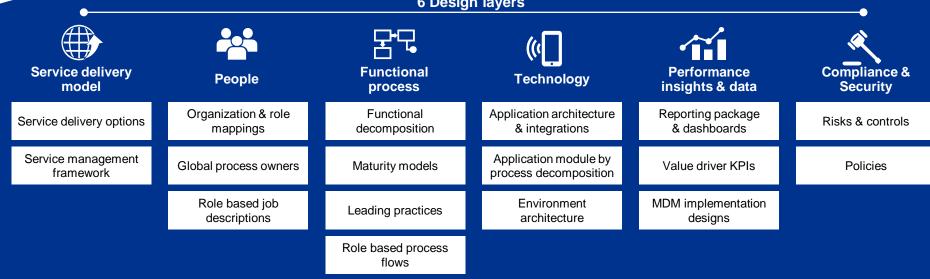
Our toolbox covers each layer of an organization

Powered Enterprise is designed specifically for SAP S/4HANA





6 Design layers





Our toolbox covers each layer of an organization

Powered Enterprise is designed specifically for SAP S/4HANA





6 Design layers



Service management framework



People

Organization & role mappings

Global process owners

Role based job descriptions



Functional process

Functional decomposition

Maturity models

Leading practices

Role based process flows



Technology

Application architecture & integrations

Application module by process decomposition

> Environment architecture



Performance insights & data

Reporting package & dashboards

Value driver KPIs

MDM implementation designs

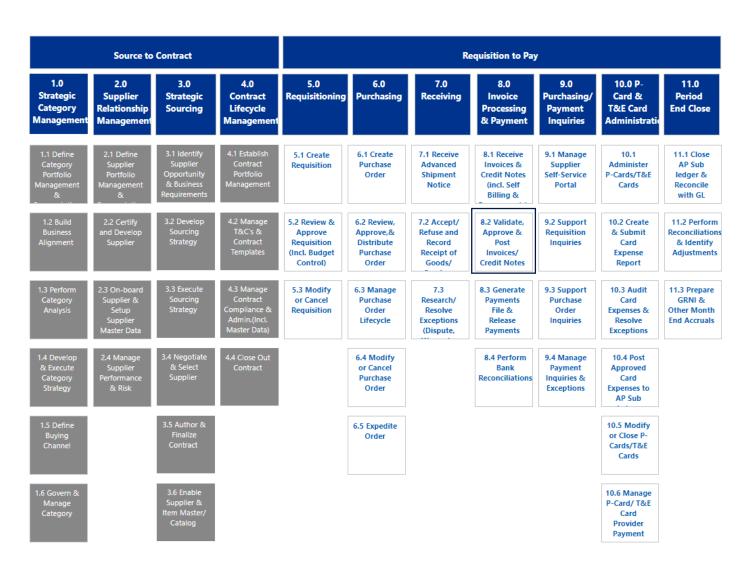


Risks & controls

Policies



From process taxonomy...

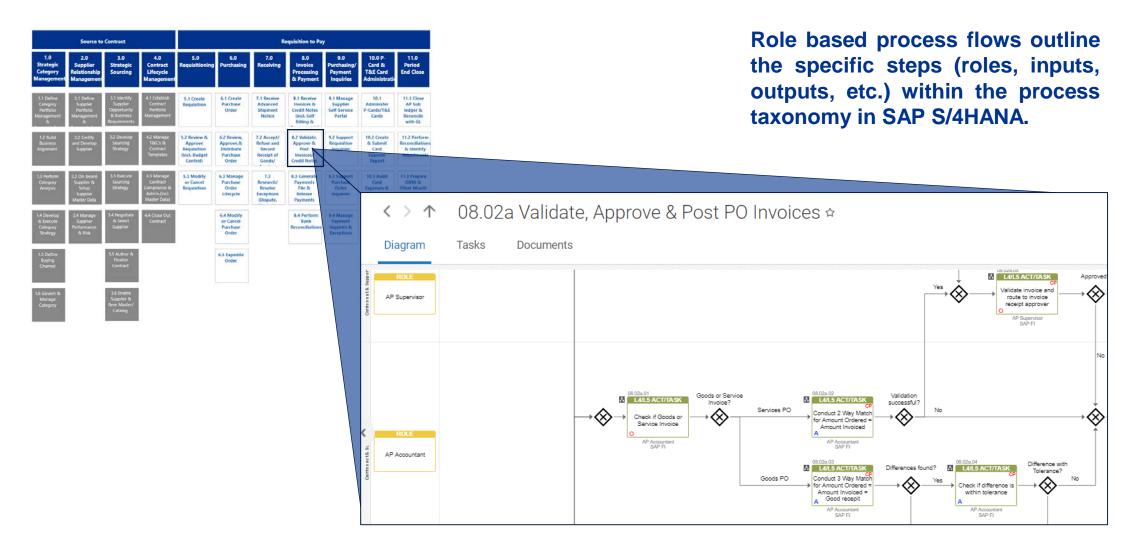


The process taxonomies lay out the leading-practice based processes, specifically tailored to SAP S/4HANA.

They are used as a starting point for defining a process based risk and control framework.

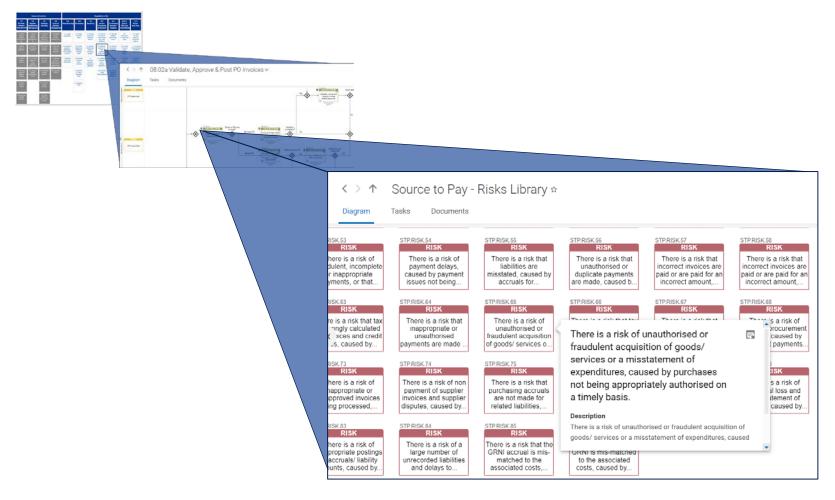


From process taxonomy... to role based process flows





To identified risks...

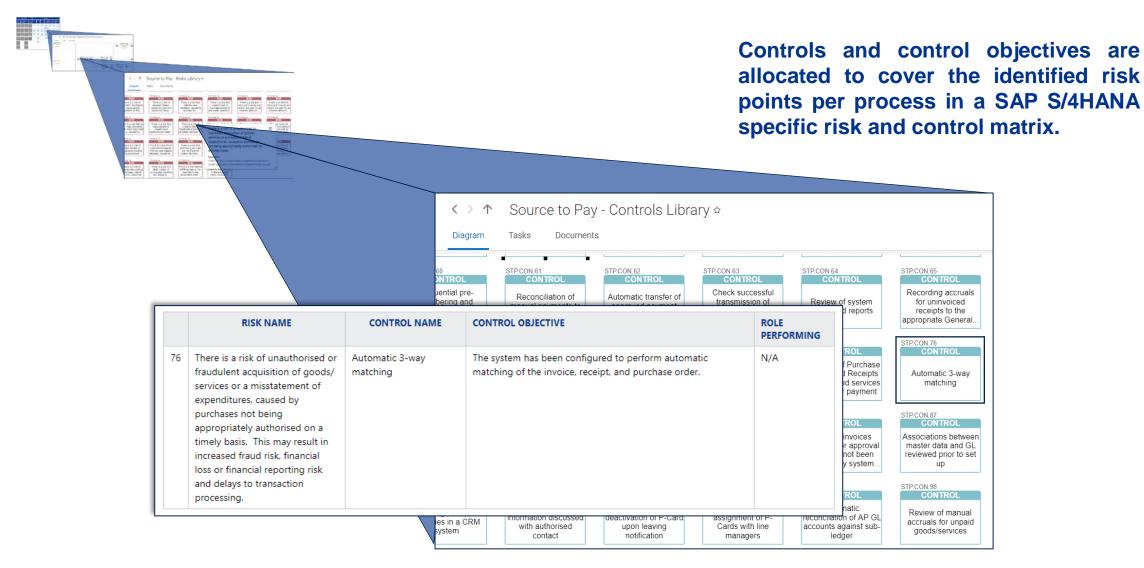


The predefined process flows and related risk points are used to perform a mapping towards the client's processes in SAP S/4HANA.

A risk matrix is created based on the Powered Enterprise assets for the inscope processes.



To identified risks... and proven controls





Global Pharmaceutical - SOx Compliancy Case Study

SAP S/4HANA Transformation SOx Compliancy

Create SOx Risk and Control Matrices (RACMs) covering approx. 100 controls on P2P, O2C, R2R, A2R, Treasury, Tax and Trade.

- 01
- Define the scope of the SOx control framework

Assess which SOx control objectives and related processes are impacting the future-state SAP S/4HANA environment.

- 02
- Validation with Powered Enterprise for SAP S/4HANA

Review of the client's SOx control objectives and mapping towards the SAP S/4HANA Powered Enterprise risk and control catalogues.

- 03
- Provide test scripts to cover control requirements

Ensure SOx compliancy of the future SAP S/4HANA environment by providing test scripts and validating test results of control requirements.

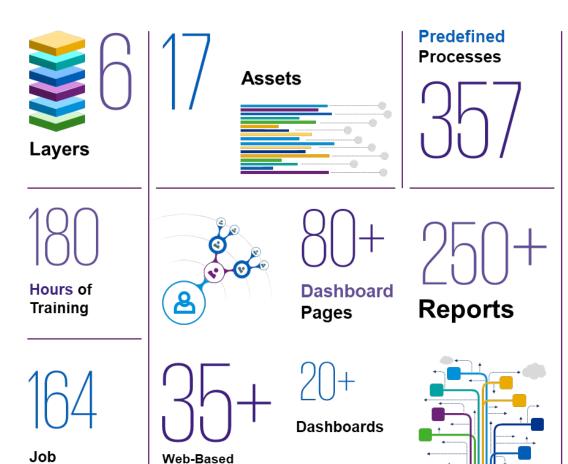
- (04)
- SAP S/4HANA risk and control framework

Update and deliver the validated SAP S/4HANA tailored SOx risk and control framework, based on Powered Enterprise assets and client specific requirements.





The Powered Enterprise toolbox



Training Courses





delivery



Predefined Security Roles



Definitions



What are your next steps towards a future state controls environment?



What's next for compliance and security?

Push to cloud solutions

Clients are moving their ERP solutions to the cloud

02

Aim for process automation

RPA, machine
learning and AI
solutions provide
opportunities to
greatly increase
process efficiencies

03

Adoption of GRC tooling

GRC tooling is becoming key for managing controls efficiently across applications

- **Standardization**
- Automation
- Real-time reporting
- **Risk reduction**
- Service driven solutions



01 - Cloud release schedule

SAP S/4HANA Cloud follows a quarterly release schedule

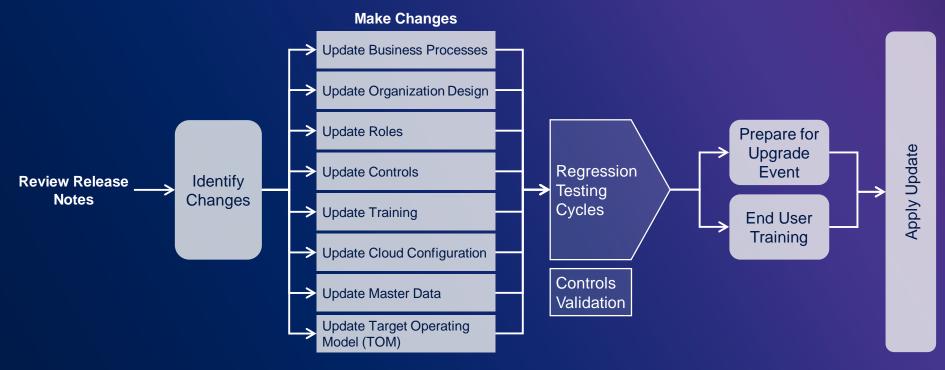
Quarterly upgrades are performed as follows:

- Q (Quality) systems are upgraded to the latest release on the 1st weekend after the RTC date
- P (Production) systems are upgraded, on the 3rd weekend after RTC date
- There is a 2-week window for your team to prepare the release

Planning 2020	Major updates – Downtime Schedule			
Cloud quarterly release name	2002	2005	2008	2011
Release to customer (RTC)	January 29	April 29	July 29	October 28
Q (Quality) systems	Feb 01/02	May 02/03	Aug 01/02	Oct 31/Nov 01
P (Production) and other types of systems (e.g. Starters)	Feb 15/16	May 16/17	Aug 15/16	Nov 14/15



01 - Impact of the cloud release schedule



Controls challenges

- Controls not embedded in process designs and flows
- Too many manual controls defined
- Singular controls
- No planning for the controls-lifecycle

Authorization challenges

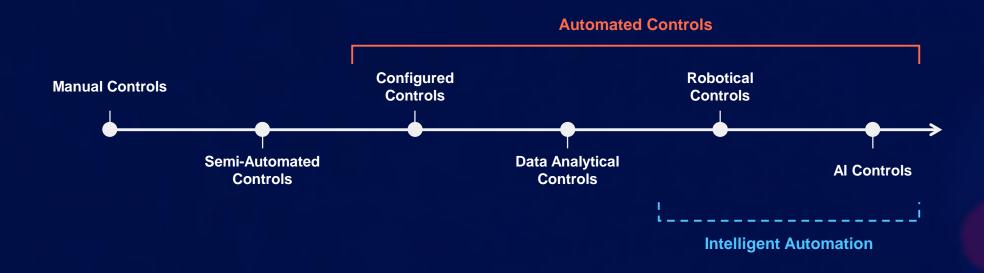
- Authorizations not aligned with business processes
- Limited testing cycles using the designed roles
- Data security (mobile devices, password authentication, ...)
- Segregation of duties implications



02 - The evolution of automated controls

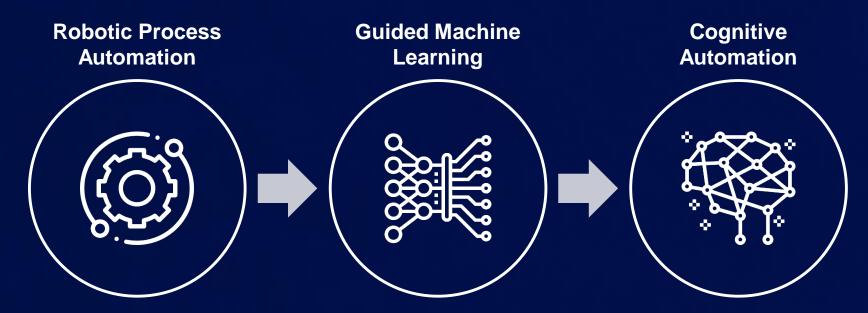
Where are we now?

- Companies are more and more adopting automated controls.
- There is still a heavy reliance on manual controls.





02 - Moving towards intelligent automation



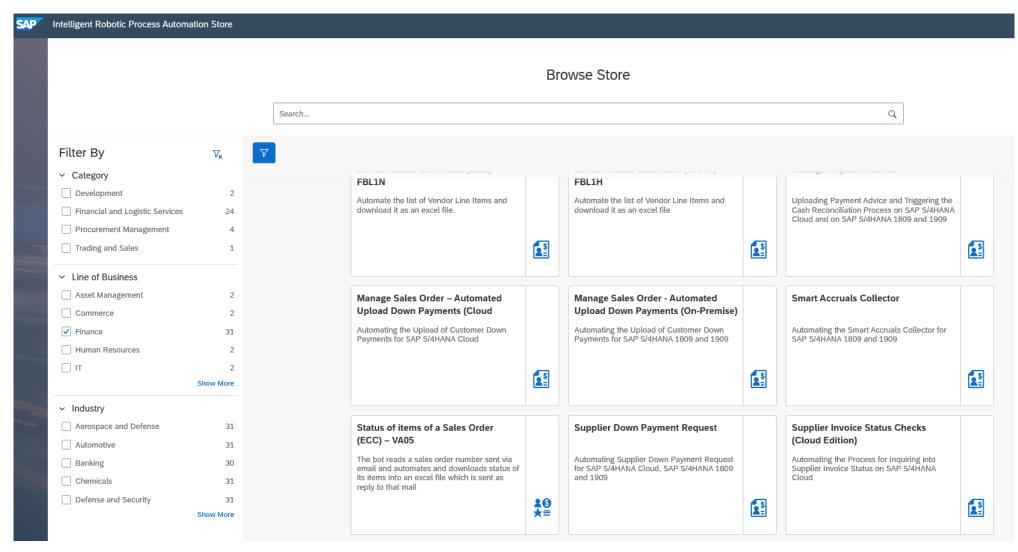
- Duplicate invoice check
- Auto population of balance sheet reconciliations
- Password checking

- Auto routing of invoices within AP
- P&L analysis and exception triggers
- System access auto approval

- Balance sheet integrity checks on transaction entry
- Blockchain automation



02 - SAP Intelligent Robotic Process Automation Store





03 - How can

GRC tooling can further increase efficiencies and reduces costs by streamlining your control testing. Tooling makes it easier to effectively monitor, manage and report on complex control environments.

Key use cases for GRC tooling are:

Continuous control monitoring

Automated monitoring of controls increases efficiencies and reduces costs. By automating monitoring activities there is less need for manual testing activities.

SoD and access reviews

Segregation of duties and user access reviews are time consuming testing activities. GRC ruleset that automatically detect conflicts can significantly decrease the amount of manual testing needed.

Access Management

IT personnel need to manually inspect user access requests, identify authorization conflicts and grant user access. GRC tooling can greatly decrease this effort by automating these activities.

Examples of tools in the market amongst others:



servicenow



Every two years, KPMG Global performs a GRC priority tools analysis in order to advise customers on the choice, implementation scope and approach with regard to GRC software solutions.





Q&A





Feel free to reach out to one of us in case of further questions!





Hans Meulmeester

KPMG Advisory
Senior Manager –
Competence Leader IT GRC Belgium

hmeulmeester@kpmg.com

+32 (0)474 75 36 87



Reinaart Claesen
KPMG Advisory
Senior Manager
rclaesen@kpmg.com
+32 (0)476 32 77 79

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